IN THE CLAIMS

Please amend claims 1, 12, 13 and 16 as indicated below.

1.   (Currently Amended) A multiprocessing system comprising:

a plurality of processing subsystems, each including a cache memory;

a memory subsystem including a directory;

a network interconnecting said plurality of processing subsystems and said memory
subsystem;

wherein the network includes a mode unit separate from the processing subsystems and
the memory subsystem, wherein the network is configured to:

receive a given coherency request initiated by a requesting processing subsystem,
wherein the given coherency request is not visible to other processing
subsystems or the memory subsystem; and

control whether the given coherency request is transmitted through said network
according to a directory protocol or a broadcast protocol; and

wherein an encoding of said given coherency request excludes an indication of whether
said given coherence request is to be transmitted according to said directory
protocol or said broadcast protocol; and

wherein when said coherency request is transmitted through said network according to
said directory protocol, said given coherency request is transmitted through said
network to only said memory subsystem.

2.   (Original) The multiprocessing system as recited in Claim 1 wherein said directory
includes a plurality of entries corresponding to different memory locations mapped to said
memory subsystem, wherein each entry contains information indicative of whether a cached
copy of a corresponding block has been created in one or more of said plurality of processing
subsystems.

3.   (Original) The multiprocessing system as recited in Claim 2 wherein when said given
coherency request is transmitted through said network according to said broadcast protocol, said

coherency request is broadcasted to said memory subsystem and to each of said plurality of processing subsystems regardless of information contained within said directory.

4.   (Original) The multiprocessing system as recited in Claim 3 wherein said given coherency request is transmitted to said network through a point-to-point link.

5.   (Cancelled)

6.   (Previously Presented) The multiprocessing system as recited in Claim 1 wherein when said given coherency request is transmitted through said network according to said directory protocol, said directory is accessed by said memory subsystem and responsive coherency commands are provided to one or more of said plurality of processing subsystems dependent upon information contained within said directory.

7.   (Original) The multiprocessing system as recited in Claim 1 wherein said mode unit includes a coherency mode storage unit configured to store an indication to control whether said given coherency request is transmitted through said network according to said directory protocol or said broadcast protocol.

8.   (Original) The multiprocessing system as recited in Claim 7 wherein said coherency mode storage unit is configured to store a plurality of additional indications to control whether other coherency requests are transmitted through said network according to said directory protocol or said broadcast protocol.

9.   (Original) The multiprocessing system as recited in Claim 8 wherein selected coherency requests are transmitted through said network according to said directory protocol while other coherency requests are transmitted through said network according to said broadcast protocol.

10.   (Original) The multiprocessing system as recited in Claim 9 wherein an address of each coherency request is used to dictate whether said each request is transmitted through said network according to said directory protocol or said broadcast protocol.

11.   (Original) The multiprocessing system as recited in Claim 1 wherein said network is implemented using a plurality of address switches.

12.   (Currently Amended) A multiprocessing system comprising:

 a memory subsystem including a directory, the directory including a plurality of directory

   entries corresponding to memory locations mapped to said memory subsystem;

 a plurality of processing subsystems each including a cache for storing blocks

   corresponding to selected ones of said memory locations;

 a network interconnecting said plurality of processing subsystems and said memory

   subsystem;

 a mode unit separate from the processing subsystems and the memory subsystem,

   wherein the mode unit is configured to provide an indication of whether a given

   block is a point-to-point mode block or a broadcast mode block;

 wherein the network is configured to route a coherency request for said given block

   initiated by one of said processing subsystems only to said <u>memory subsystem</u>

   <u>including said</u> directory in response to said indication indicating said given block

   is a point-to-point mode block, and wherein said network is configured to

   broadcast said coherency request to said memory subsystem and to each of said

   plurality of processing subsystems in response to said indication indicating said

   given block is a broadcast mode block, whereby a conveyance of said coherency

   request through said network according to either a directory protocol or a

   broadcast protocol is performed transparent to said one of said processing

   subsystems.

13.   (Currently Amended) A method of operating a multiprocessing system including a plurality of processing subsystems and a memory subsystem interconnected through a network, the method comprising:

 a first processing subsystem initiating a coherency request; and

a mode unit separate from the processing subsystems and the memory subsystem receiving said coherency request and indicating whether said coherency request is to be transmitted through said network according to a directory protocol or a broadcast protocol, wherein the coherency request is not visible to other processing subsystems or the memory subsystem;

said network conveying said coherency request using either said directory protocol or said broadcast protocol according to said indication and transparent to said first processing subsystem, wherein when said coherency request is transmitted through said network according to said directory protocol, said given coherency request is transmitted through said network to only said memory subsystem; and

accessing a directory entry in response to said coherency request when said coherency request is transmitted through said network according to said directory protocol.

14.   (Original) The method as recited in claim 13 further comprising said mode unit accessing a coherency mode storage unit that stores an indication that indicates whether said coherency request is to be transmitted through said network according to said directory protocol or said broadcast protocol.

15.   (Cancelled)

16.   (Currently Amended) A multiprocessing system comprising:

a plurality of processing subsystems;

a memory subsystem;

a network interconnecting said plurality of processing subsystems and said memory subsystem, wherein said network is configured to receive a coherency request

initiated by a requesting processing subsystem, wherein the coherency request is not visible to other processing subsystems or the memory subsystem; and

a mode unit separate from the processing subsystems and the memory subsystem and configured to:

~~receive a coherency request initiated by a requesting processing subsystem, wherein the coherency request is not visible to other processing subsystems or the memory subsystem; and~~

control whether the coherency request is transmitted through said network according to a directory protocol or a broadcast protocol, whereby a conveyance of said coherency request through said network according to either said directory protocol or said broadcast protocol is performed transparent to said plurality of processing subsystems; and

wherein when said coherency request is transmitted through said network according to said directory protocol, said coherency request is transmitted through said network to only said memory subsystem.

17. (Original) The multiprocessing system as recited in claim 16 wherein said mode unit includes a coherency mode storage unit configured to store an indication to control whether said coherency request is transmitted through said network according to said directory protocol or said broadcast protocol.

18. (Original) The multiprocessing system as recited in claim 17 wherein said coherency mode storage unit is configured to store a plurality of additional indications to control whether other coherency requests are transmitted through said network according to said directory protocol or said broadcast protocol.

19.   (Original) The multiprocessing system as recited in claim 18 wherein selected coherency requests are transmitted through said network according to said directory protocol while other coherency requests are transmitted through said network according to said broadcast protocol.

20.   (Original) The multiprocessing system as recited in claim 19 wherein an address of each coherency request is used to dictate whether said each request is transmitted through said network according to said directory protocol or said broadcast protocol.